



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,830	02/27/2004	Jody K. Rice	ITW 13128.02	7347
23721	7590	09/21/2004	EXAMINER	
CORRIGAN LAW OFFICE 5 BRIARCLIFF CT APPLETON, WI 54915			SHAW, CLIFFORD C	
			ART UNIT	PAPER NUMBER
			1725	

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/788,830	RICE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Clifford C Shaw	1725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 August 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 38-70 is/are pending in the application.
- 4a) Of the above claim(s) 53-70 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 38-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>0708</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

**Detailed Action**

1.) Applicant's election without traverse of the invention of Group I (as set forth in the Restriction requirement mailed on 7/22/2004) in the reply filed on 8/4/2004 is acknowledged. Accordingly, claims 38-52 are examined in the instant Office action and claims 53-70 are withdrawn from further consideration as being drawn to a non-elected invention.

2.) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3.) Claims 38, 39, 40-44, 46-50, and 52 are rejected under 35 U.S.C. 102(b) as being anticipated by Toth (4,288,682). Figures 1 and 3 and the discussion thereof in the patent to Toth (4,288,682) disclose the subject matter claimed, including: welding power source 11; wire feeder with a speed control input associated with controller 54; the controller 54 having a weld speed set point arrangement at 56 and a run-in wire feed speed set point arrangement at 58. In regard to the claim language specifying that the run-in speed is a set percent of the weld speed, note that by setting the run-in speed separately and independently from the weld speed, the run-in speed is inherently a set percentage of the weld feed speed. In regard to the enable input and trigger state limitations in claims 41-44 and 52, see the enable and switch circuitry associated with elements 35 and 36 in figure 3 of Toth (4,288,682).

4.) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5.) Claims 40 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toth (4,288,682). The only aspect of the claims to which the rejection above does not apply is the provision for percentages between 25% and 150% for the relationship between the run-in speed and the weld speed. This difference does not patentably distinguish over the prior art. At the time applicant's invention was made, it would have been obvious to have adjusted the controls 56 and 58 in Toth (4,288,682) for any convenient wire feed speeds, depending on the requirements of a particular welding situation. These wire feed speeds could obviously fall within the broad range claimed based on routine choices for a particular situation, thereby satisfying the claims.

6.) Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Toth (4,288,682) as applied to claims 38, 39, 40-44, 46-50, and 52 above, and further in view of Gilliland (5,136,139). The only aspect of the claim to which the rejection above does not apply is the provision for a microprocessor controller. This difference does not patentably distinguish over the prior art. At the time applicant's invention was made, it would have been obvious to have used any type of control technology to implement the wire feed approach taught by Toth

Art Unit: 1725

(4,288,682). In particular, it would have been obvious to have used a microprocessor to implement the wire feed control taught by Toth (4,288,682), the motivation being the teachings of Gilliland (5,136,139) that it is advantageous to use a microprocessor for wire feed control (see figure 4, elements 122, 136, and 126 in Gilliland (5,136,139)).

7.) The patents to Hongu et al. (5,168,144), Tuthill (3,010,012), and Shaffer (2,364,920) are cited to show prior art wire feed arrangements with user controls for independently selecting weld wire feed speed and run-in speed. The patent to Cox et al. (4,608,482) is cited to show prior art computer control of a wire feed system.

Any inquiry concerning this communication should be directed to Clifford C Shaw at telephone number 571-272-1182. The examiner can normally be reached on Monday through Friday of the first week of the pay period and on Tuesday through Friday of the second week of the pay period.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Thomas G. Dunn, can be reached at 571-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

Art Unit: 1725

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Clifford C Shaw  
Primary Examiner  
Art Unit 1725

September 17, 2004